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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/004,952	12/05/2001	Yves Schabes	2001323-0014	8503

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CHOATE, HALL & STEWART LLP  
TWO INTERNATIONAL PLACE  
BOSTON, MA 02110

EXAMINER

TO, BAOQUOC N

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/004,952	<b>Applicant(s)</b> SCHABES ET AL.	
	<b>Examiner</b> Baoquoc N. To	<b>Art Unit</b> 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6,16-18,20,21,25,27,34-36,39 and 64-68 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,16-18,20,21,25,27,34-36,39 and 64-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/01/2006 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed 12/01/2005 have been fully considered but they are not persuasive.

Applicant argues "smith does not teach receiving a query composed of one or more fully specific terms and one or more at least partially unspecified terms. The examiner has pointed to Smith at column 5, lines 53-67 for such a teaching. Here, Smith merely uses the well known wildcard operator. For example, cat\* would return the words cat, catch, or catastrophe. However, there is no fully specified term in that example. As to relative order, Smith merely teaches that order can be prescribed such that if a user want to search a space for objects where the word "cat" precedes the word "hat" he can enter the appropriate search query. This teaching in Smith does not anticipate the claim language."

The examiner respectfully disagrees with the above argument. As disclosed by Smith, "the search query comprises a plurality of words and a plurality of attributes,

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where the attributes define condition imposed on the search" (col. 3, lines 3-6). Smith also discloses "in the preferred embodiment, the search query is a Boolean phrase of expression, words, operators, and switches. Expressions are mere combination, contained the parentheses ("(" and ")") of other words, operators, switches, and nested expression..." (col. 5, line 67). With the combination of expression, the user is able to input at least one word and a partial word with wild card symbol to retrieve the full word and partial word in the order of the request for example "cat..hat" will be with cat retrieval word hat, or cat\*..hat will be one of the query string to be input wherein this is the same with the claimed limitations wherein cat is always precedes hat in the relative order of inputted request.

All dependant claims will be rejected as to their based claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-6, 16, 20-21, 25, 27, 34-36, 39 and 64-68 are rejected under 35 U.S.C. 102(e) as being anticipated by Smith (US. Patent No. 6,081,804).

Regarding on claims 1 and 66, Smith teaches a method of fulfilling an information need, comprising the steps of:

receiving a query comprised of one or more fully specified terms (word) and one or more at least partially unspecified terms (\*, ?..) (col. 5, lines 52-67 and col. 3, lines 3-6); and

determining one or more matches for the query, wherein a criterion for determining one of said matches specifies that a relative order of at least one term of said query need not be preserved with respect to at least one other term included in the query (if the user, wants to search a search space for objects where the word "cat" preceded the word hat where the result be always be first cat retrieval word and hat) (col. 3, lines 15-23 and col. 5, lines 7-51).

Regarding on claim 2, Smith teaches identifying documents in an index that contain the one or more at least partially unspecified terms, the index including preanalyzed text terms appearing within a plurality of document (col. 6, lines 1-49).

Regarding on claim 3, Smith teaches converting the query into a finite state machine; and matching the finite state machine against the identified contexts (col. 6, lines 1-49).

Regarding on claim 4, Smith teaches the finite state machine is a finite state transducer (col. 6, lines 1-49).

Regarding on claim 5, Smith teaches the finite state machine allows for the appearance of fully specified and at least partially unspecified terms in any order in a potential matching context (query cat result catch) (col. 6, lines 1-49).

Regarding on claim 6, Smith teaches the finite state machine allows for one or more intervening words between the fully specified and at least partially unspecified terms in a potential matching context (query cat result catch) (col. 6, lines 1-49).

Regarding on claim 16, Smith teaches the contexts are stored as finite state machines (col. 6, lines 1-49).

Regarding on claim 20, Smith teaches assigning a score to a match (weight) (col. 2, lines 7-19).

Regarding on claim 21, Smith teaches the score reflects the number of times an instance of the match is located among the plurality of documents (col. 2, lines 7-19).

Regarding on claim 25, Smith teaches ranking the documents that contain a match, and wherein the second outputting step comprises outputting the document identifiers or locations of the documents that contain a match in an order based on the ranking weight) (col. 2, lines 7-19).

Regarding on claim 27, Smith teaches said one or more partially unspecified terms includes a syntactic or a morphological restriction (lower case or upper case) (col. 6, lines 1-49).

Regarding on claim 34, Smith teaches the index comprises locations of terms within documents (the object must be found in the first page) (col. 6, lines 1-49).

Regarding on claim 35, Smith teaches determining the location of a term in the query within a document using the index; and locating a match for the query based on the location of the term within the document.

Regarding on claim 36, Smith teaches ranking a plurality of the located matches or portions thereof (weight) (col. 2, lines 7-19).

Regarding on claim 39, Smith teaches the ranking is based on one or more features selected from the list consisting of the location of a match within a document, a weight assigned to a document that contains a match, the age of a document that contains a match, the source of a document that contains a match, and a format feature of a match within a document (col. 2, lines 7-19).

Regarding on claims 64 and 67, Smith teaches the query includes a delimiter indicating a first portion of said query for which a relative order is preserved for one or more terms included in said portion, said relative order being in accordance with a physical position of each term in said first portion with respect to any other terms in said first portion (col. 6, lines 1-49).

Regarding on claims 65 and 68, Smith teaches one of said at least partial unspecified terms includes a predefined character sequence representing a matching restriction that defines at least one of: a syntactical criteria, a morphological criteria, and a criteria defined in accordance with a determination by a computer program, and said one or more matches for the query are determined in accordance with said matching restriction (col. 6, lines 1-49).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (US. Patent No. 6,081,804) in view of Lee et al. (US. Pub. No. 2001/0044720 A1).

Regarding on claim 17, Smith does not teach the documents are accessible over the Internet. However, Lee teaches documents are accessible over the Internet (paragraph 0005). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Smith's system to include documents are accessible over the Internet by Lee in order to retrieve documents from the distance.

Regarding on claim 18, Smith does not teach the documents comprise World Wide Web pages. However, Lee teaches teach the documents comprise World Wide Web pages (paragraph 0005). Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to modify Smith's system to include documents comprise World Wide Web pages by Lee in order to retrieve documents from the distance.



***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is at 571-272-4041 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at 571-272-4107.


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Baoquoc N. To  
February 20<sup>th</sup>, 2006

  
PRIMARY EXAMINER